

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

United States Department of Agriculture,

BUREAU OF PLANT INDUSTRY,

Farmers' Cooperative Demonstration Work,

WASHINGTON, D. C.

RESULTS OF DEMONSTRATION WORK IN BOYS' AND GIRLS' CLUBS IN 1912.¹

INTRODUCTION.

Boys' corn clubs and girls' canning and poultry clubs are performing the function for which they were established in the Southern States. They were organized as an outlet for activities of boys who wished to become demonstrators of better methods of farming, to encourage more boys and girls to become actively interested in the practical side of farm and home problems, to create a wholesome cooperation among members of the family and the clubs, and to furnish to teachers the connecting link between practical agriculture and home economics and the school.

It was decided that boys' plats should contain 1 acre and girls' gardens one-tenth of an acre each. Instructions in the preparation of seed beds, the fertilization of plats, the cultivation of the plants, and the handling of crops are given through circulars and bulletins sent from the United States Department of Agriculture and cooperating agencies, and by demonstration agents, county superintendents of education, and teachers of rural schools. It has been learned that aggressive, progressive county superintendents of education are using the work in the clubs as a medium to correlate the courses of study in their schools to the activities of the life of rural communities. Live, energetic, active teachers are using the knowledge and experience of boys and girls gained on their plats for material in preparing lessons in language, lessons in natural science, lessons in drawing, and lessons in mathematics. The work of vitalizing their course of study by school officials and teachers has resulted in a much greater interest in school work on the part of the pupils. This has been noted in numerous instances in the improved booklets submitted by boys and girls on the history of their crops. A facsimile copy of a "History of an Acre of Corn," by Fred Robertson, of Fulton County, Ark., a member of a corn club, has been published by the Little Rock Board of Trade. The following quotation is taken from this history:

The Girls' Canning Club and the Boys' Corn and Cotton Clubs have made quite a change in the methods of agriculture in this section of the Ozarks this year, and the new methods which are being introduced by the demonstration agents are a great help toward the improvement of the farms of Fulton County.

Reports similar to this have been received from every section of the territory in which the clubs have been organized.

¹ This circular is prepared for use in the Southern States by Messrs. O. B. Martin, Assistant in Charge, and I. W. Hill, Assistant, who personally supervise the boys and girls' club work of the Office of Farmers' Cooperative Demonstration Work of the Bureau of Plant Industry. Similar work in the Northern and Western States is supervised by the Office of Farm Management of the Bureau of Plant Industry.

The social side of life is cultivated through the corn clubs and the canning and poultry clubs. Boys meet in rallies and girls in canning parties (fig. 1), and they both meet at picnics to which their parents and friends are invited. Some clubs have baseball and basket-ball teams.

A closer relationship between city and country folks has been brought about by these clubs. The city people appreciate the efforts of the boys and girls in the country to furnish a supply of good, wholesome food, and the boys and girls appreciate the entertainment given to them by the city folks. In Atlanta, Ga., in December, 1912, private entertainment in the best homes was furnished to about 1,000 boys and girls at the meeting of State corn clubs. On the last day of the meeting a splendid turkey dinner was served.

The clubs are arousing a spirit of wholesome cooperation among members of the family in the home. The boys are assisting the father to provide a supply of "bread and meat" on the farm, and the girls are aiding the mother to fill the pantry with fruits and vegetables which have hitherto gone to waste. An example is given



FIG. 1—A canning party, Carrabelle, Fla.

from Alabama, where the success of the boy in growing an acre of corn has enabled the father to buy 40 acres of land for a home.

The following records by States are noteworthy in showing what has been accomplished:

Alabama:

137 boys made over 100 bushels to the acre.
203 boys averaged 112.16 bushels to the acre.
These boys received certificates of honor.
Average produced by boys reporting, 62.3 bushels.

Arkansas:

7 boys made over 100 bushels to the acre.
122 boys, between 50 and 100 bushels to the acre.
Average produced by boys reporting, 49½ bushels.

Florida:

1 boy made over 100 bushels to the acre.
179 boys averaged 38.58 bushels to the acre.

Georgia:

69 boys made over 100 bushels to the acre and received certificates of honor from the State College of Agriculture.
Average produced by boys reporting, 56.4 bushels.

Louisiana:

10 boys made over 100 bushels to the acre.
Average produced by boys reporting, 55.32 bushels.

Mississippi:

3 boys made over 200 bushels to the acre.
46 boys, over 100 bushels to the acre.
Average produced by boys reporting, 66.3 bushels.

North Carolina:

75 boys made over 100 bushels to the acre.
233 boys, between 80 and 100 bushels to the acre.
Average produced by boys reporting, 62.8 bushels.

Oklahoma:

8 boys made over 100 bushels to the acre.
226 boys, between 40 and 100 bushels to the acre.
Average produced by boys reporting, 48 bushels.

South Carolina:

1 boy made over 200 bushels to the acre.
74 boys, over 100 bushels to the acre.
48 boys, between 80 and 100 bushels to the acre.
Average produced by boys reporting, 68.79 bushels.

Tennessee:

15 boys made over 100 bushels to the acre.
731 boys averaged 91.46 bushels to the acre.

Texas:

3 boys made over 100 bushels to the acre.
10 boys, over 75 bushels to the acre.
Average produced by boys reporting, 38 bushels.

Virginia:

44 boys made over 100 bushels to the acre.
295 boys, between 50 and 100 bushels to the acre.
Average produced by boys reporting, 59½ bushels.

These statistics are given to show that the work has now been established in the territory of the Farmers' Cooperative Demonstration Work and not for comparison of the States. In fact, comparisons would be unfair, owing to surrounding circumstances.

It is a noteworthy fact that the prize-winning boys (fig. 2) and girls followed the fundamental principles of good farming, such as deep fall plowing, the thorough pulverization of the soil, seed selection, suitable spacing, intensive cultivation, the increase of humus in the soil, the economical use of fertilizers, and the keeping of accurate farm accounts.

The influence of the training received in boys' corn clubs is frequently shown in the after history of the boys. Jerry Moore, the prize winner of South Carolina in 1910, is taking the agricultural course in Clemson Agricultural College, and Ben Leath, the prize winner of Georgia in 1911, after making 720 bushels of corn on 5 acres in 1912, is taking the agricultural course in the University



FIG. 2.—Frank G. Brockman, Amherst, Va., and his 167 bushels of corn produced on 1 acre in 1912.

of Georgia. Many girls also, becoming interested in canning, have taken the domestic science course in the normal and industrial colleges.

In addition to corn clubs, kafir-corn and milo-maize clubs have been organized in Texas and Oklahoma. These clubs enrolled 1,426 members in 1912. Cotton and potato clubs have also been organized. Pig clubs, poultry clubs, and other clubs for boys and girls having for their object instruction in animal husbandry are being organized and conducted by the demonstration agents in cooperation with experts of the Bureau of Animal Industry and several of the agricultural colleges.

PRIZES.

The boys' and girls' demonstration work is not a contest in corn and vegetable growing in which every member is left to prepare, plant, fertilize, and cultivate in his own way. By means of circulars and bulletins sent out from the United States Department of Agriculture and by the cooperation of school officers, teachers, and demonstration agents it is planned to have every club member instructed, directed, guided, and trained on his own plat or on the plat of a neighbor. Prizes are offered by public-spirited citizens and

civic and commercial organizations to arouse interest and to keep up enthusiasm.

It is noteworthy that prize-winning boys and girls elect to take courses in agricultural schools and colleges and trips of educational value when the opportunity of choice is presented. W. P. Brown, the prize winner in Arkansas in 1912, preferred a \$300 scholarship in college to all the other prizes offered in the State.

Every effort is being put forth to get away from the giving of large individual cash prizes. The real ultimate value of such prizes is seriously questioned. Prizes which help to educate the boy or girl or which stimulate an effort on the part of a large number are favored, such as scholarships or expenses in agricultural colleges or at short courses and prizes to be divided equally among the members of the largest county club to complete the year's work and make final report, etc.

The trips to Washington are considered the capital prizes. The State winners of these prizes receive diplomas from the Secretary of Agriculture and become members of the All-Star Corn Club of the United States. Therefore it is earnestly urged that these trips be given only to State prize winners. Efforts will be made to confine these diplomas to the State prize winner in each State hereafter.

PRIZE WINNERS.

In 1909 the following were prize winners of the 10,543 boys enrolled in corn clubs: Elmer Halter, Arkansas; De Witt Lundy, Mississippi; Bascomb Usher, South Carolina; Ralph Bellwood, Virginia. These boys won the first prize trips to Washington, received the first diplomas from the Secretary of Agriculture, and became the charter members of the All-Star Corn Club.

In 1910, 46,225 were enrolled. The following were the prize winners who came to Washington: Hughey Harden, Alabama, 120 bushels of corn, costing 32 cents per bushel; Ira Smith, Arkansas, 119 bushels, at 8 cents; Joseph Stone, Georgia, $102\frac{5}{8}$ bushels, at 29 cents; Stephen Henry, Louisiana, $139\frac{4}{5}$ bushels, at 13.6 cents; William Williams, Mississippi, $146\frac{4}{7}$ bushels, at 18 cents; Ernest Starnes, North Carolina, $146\frac{2}{7}$ bushels, at 27 cents; Floyd Gayer, Oklahoma, $95\frac{1}{12}$ bushels, at 8 cents; Jerry Moore, South Carolina, $228\frac{3}{4}$ bushels, at 43 cents; and Maurice Olgers, Virginia, 168 bushels, at 40 cents.

In 1911, 56,840 members were enrolled and the following came to Washington as prize winners: Junius Hill, $212\frac{1}{2}$ bushels, at 8.6 cents, and Eber Kimbrough, $224\frac{3}{4}$ bushels, at 19.8 cents, Alabama; Burley Seagreaves, 124.9 bushels, at 11.9 cents, and Walter Hale, $141\frac{5}{8}$ bushels, at 44.1 cents, Arkansas; Ben Leath, $214\frac{5}{7}$ bushels, at 14.2 cents, and Arthur Hill, $180\frac{3}{5}$ bushels, at 42 cents, Georgia; Edward Doyle, 126 bushels, at 12.7 cents, Illinois; Carl Duncan, $97\frac{4}{5}$ bushels, at 13.7 cents, and Howard Burge, 78 bushels, at 21 cents, Kentucky; John H. Henry, jr., $150\frac{3}{4}$ bushels, at 16.3 cents, Louisiana; Bennie Beeson, $227\frac{1}{16}$ bushels, at 14 cents, John Bowen, $221\frac{1}{5}$ bushels, at 16 cents, and Bernie Thomas, 225 bushels, at 34.5 cents, Mississippi; Charles Parker, jr., 195.9 bushels, at 24 cents, North Carolina; Philip Wolf, $80\frac{7}{8}$ bushels, at 13.3 cents, Oklahoma; Claude McDonald, $210\frac{4}{7}$ bushels, at $33\frac{1}{3}$ cents, and Miller Hudson, $151\frac{1}{4}$ bushels, at 41 cents, South Carolina; Norman Smith, 168.3 bushels, at 21 cents, John V. McKibbin, 167.1 bushels, at 32 cents, Tennessee; and John A. Johnston, jr., $164\frac{3}{4}$ bushels, at 34 cents, Virginia.

TABLE I.—Records of State prize winners in boys' corn and cotton clubs in 1912.

Name and address.	Character of soil.	Yield per acre.	Cost per bushel.	Depth of plowing.	Kind of corn or cotton.	Distance between—		Cultiva- tions.	Remarks.
						Rows.	Hills.		
Willie Atchison, McCalla, Ala.....	Dark red.....	<i>Bushels.</i> 198.25	<i>Cents.</i> 17.9	<i>Inches.</i> 6	Mosby Prolific.....	<i>Feet.</i> 4	<i>Inches.</i> 8	3	Used five 2-horse loads of stable manure and 400 pounds of fertilizer. Land broken and subsoiled in November, 1911.
J. P. Leach, Union Grove, Ala.....	Sandy; clay subsoil....	196.27	10.39	10	Improved.....	3	6	5	
Horace Calhoun, Scott, Ark.....	Black loam.....	(¹)			Triumph (cotton).....	6	54	12	Cotton followed by corn and cowpeas.
Richard Miller, Baker, Fla.....	Black sandy.....	129.2	26.4	18	Hastings Prolific.....	3½	10	4	Used 500 pounds of phosphate.
Byron Bolton, Dawson, Ga.....	Red pebble and clay subsoil.	177.6	13.8	14	Selected seed.....	4½	4-8	6	Corn followed cotton.
Walter Bridges, Zeigler, Ga.....	Gray pebble and clay..	156	31.2	14	Hastings Prolific.....	2½	6	4	Made 309.06 bushels on 2 acres.
John M. Cobb, Vowells Mill, La.....	Black sandy loam.....	131.5	15	5	White Dent.....	3	18	3	Used stable manure.
Carlous Reddock, Summerland, Miss.	Black loam.....	206.6	13.6	10	Hastings Prolific.....	3½	11	7	Land built up with stable manure and cotton seed for 20 years.
Dewey McGhee, Smithdale, Miss....	Light sandy loam.....	171	17.5		Jones Prolific.....	3½	15	4	Broke land twice, in January and in March.
Marion Kelly, Satartia, Miss.....	River bottom; clay subsoil.	152	20.6	20	Hastings Prolific.....	3½	16	4	Land in oats followed with peas in 1911.
Elmer Brunt, McCool, Miss.....	Sandy.....	137.5	14.4	14	Mosby Prolific.....	4	12-14	5	Used 600 pounds of fertilizer.
Benson Stevenson, Olive Branch, Miss.	Clay loam; red clay subsoil.	99.75	34.8	4	Hastings Prolific.....	3½	20	6	Used stable manure and commercial fertilizer.
Shepperd Darnell, Lexington, Miss.	Gray loam; clay subsoil.	94	20	10	Mosby Prolific.....	4	18	7	Used 3 loads of barnyard manure.
George E. West, jr., Kingston, N. C..	Black loam.....	184.8	19	10	Prolific.....	2-5	10	5	Member of corn club 3 years.
Herbert Allen, Pungo, N. C.....	Black; clay subsoil....	83.75	14.2	8	White.....	4	18	6	No fertilizer used.
Elston Coleman, Newkirk, Okla....	Black sandy loam.....	101.08	14.5	7	Johnston County White.	3	14	13	Seed secured from a world's champion bushel.
Ernest Worthy, Baum, Okla.....	Red bottom.....	(²)			Mebane (cotton).....	4	18	4	No fertilizer used.
Ernest M. Joye, Venters, S. C.....	Dark.....	207.1	43.3	12	Batts.....	4	8	8	Corn bought from Jerry Moore; about 14,000 stalks on acre; only 1 barren.
Edgar S. Burry, Taylors, S. C.....	Gray sandy.....	109.1	39.2	14	Marlboro.....	3½	10	4	Used 2,900 pounds of fertilizer.
Howard Riggins, Clarksville, Tenn.	Black with red clay subsoil.	161	13.8	9	White Garrott.....	3	9	3	Too wet to plow much.
Chester Earl Davis, Grapeland, Tex.	Dark sandy loam.....	122.5	9.4	10	White Dent.....	3½	18	2	Corn followed cotton.
Frank G. Brockman, Amherst, Va.	Dark loam.....	167	23.5	14	Boone County White..	3½	9½	5	Dry weather reduced yield; had 16,000 stalks.

¹ Yield of cotton, 3,211 pounds on 2 acres.² Yield of cotton, 5,758 pounds on 2 acres.

In 1912 the enrollment of club members went to 72,991, and those whose names appear in Table I came to Washington as prize winners. Some of them came, however, as winners in their congressional districts.

MOISTURE CONTENT OF THE CORN.

It was thought by some that the moisture content in corn where such large yields were made was too great. In order to determine this, samples of corn in moisture-tight containers were sent to the Office of Grain Standardization of the Bureau of Plant Industry at the time of harvesting. The analyses made prove conclusively that the moisture content in southern corn is not too great, but is frequently much less than is found in corn from other sections.

TABLE II.—Results of moisture tests of corn, by States.

State.	Number of tests.	Per cent of moisture.		
		Highest.	Lowest.	Average.
Alabama.....	111	21.4	10.4	16.37
Arkansas.....	5	27	13.4	16.92
Georgia.....	42	21.1	11.6	15.64
Mississippi.....	55	22	12.2	15.10
North Carolina.....	23	24	13.4	16.53
Oklahoma.....	7	12.5	11.6	12.14
South Carolina.....	32	18.4	10.8	14.35
Tennessee.....	10	23.1	15.3	17.71
Texas.....	3	13.2	12.4	12.86
Virginia.....	30	26.2	13.7	18.61
Total and average.....	318			16

GIRLS' CANNING AND POULTRY CLUBS.

In 1910 girls' canning and poultry clubs were organized in two States along lines Dr. S. A. Knapp had been developing for more than two years. In this year 325 girls were enrolled. The work was popular from the beginning. In 1911, 3,000 girls in 8 different States joined the clubs. In 1912 the work was placed in 12 States, and the enrollment was more than 23,000.

Many valuable prizes were won by the girls. Miss Viola Lewis, of Arkansas, won a prize trip to Washington. She received the first diploma ever given to a girl by the Secretary of Agriculture. The following girls made the best records of yields of tomatoes in pounds and cans in their respective States on one-tenth of an acre:¹

TABLE III.—Prize winners in girls' canning clubs in 1912.

State.	Name of winner.	Weight of fresh tomatoes	Cans used.	
			Number.	Size.
		<i>Pounds.</i>		
Alabama.....	Arie Hovater.....	4,531	1,530	3
Arkansas.....	Gela Hope Branden.....	1,706	* 575	3
Florida.....	Ada Huggins.....	2,970	1,000	3
Georgia.....	Dannie Wicker.....	3,100	750	3
Louisiana.....	Haydee Briley.....	3,746	1,262	3
Mississippi.....	Nannie Chatham.....	3,037	1,852	2
North Carolina.....	Alma Parker.....	3,526	1,188	3
Oklahoma.....	Anice Thompson.....	721	* 243	3
South Carolina.....	Lillie May Du Bose.....	4,476	1,413	3
Tennessee.....	Sylvia Richmond.....	3,485	1,174	3
Texas.....	Annie Wolf.....	1,575	960	2
Virginia.....	Bessie Starkey.....	5,928	1,871	3

* Sold fresh vegetables which were not weighed.
¹ Where yields were reported only in number of cans, an approximate weight of fresh tomatoes was arrived at by estimating No. 3 cans at 38 ounces and No. 2 cans at 21 ounces and allowing 25 per cent for waste.

The average profit made on one-tenth of an acre by all girls reporting in 12 States is \$21.98.

Never before have the homes been so well supplied with fresh vegetables in season and with pure, wholesome fruits, berries, and vegetables in the winter. In addition to supplying home needs, many girls have nice bank accounts. The money profit from their tenth-acre gardens, as shown by reports, runs from \$12 to more than \$100. The indirect effect of the girls' work on the farmers and their wives is even greater than in the boys' work. When they see in the canning demonstrations how easy it is to keep their fruits and vegetables, which have hitherto gone to waste, they purchase home canners and can their own products. Numerous adult canning clubs have been organized among the women, who take their lessons from the agents while demonstrating for the girls.



FIG. 3.—President Taft and the corn-club boys at the White House in January, 1913.

TRIP TO WASHINGTON.

The trip of the prize winners to Washington was worth much to them. They spent a week in the Capital. They visited Mount Vernon, Arlington, Fort Myer, the Naval Gun Factory, and other Government buildings. They were received at the White House by President Taft (fig. 3) and at the Capitol by Speaker Clark and by the Committee on Agriculture of the House of Representatives. They were received with marked courtesy by the Secretary of Agriculture. In his address to the boys and Miss Lewis before presenting their diplomas Secretary Wilson emphasized the importance of training boys and girls on the farm in order to improve agricultural conditions throughout the country.

EXPOSITION SCHOOL FOR PRIZE WINNERS.

In conjunction with the Fifth National Corn Exposition at Columbia, S. C., January 27 to February 8, 1913, there was held an exposition school for the prize winners from the several States. Each State was permitted under the rules adopted to send a number of boys to the school equal to double the number of counties in the State, and also a team of five girls from each State. The exposition trophy was a bust of Dr. Seaman A. Knapp. In competing for this trophy the records of 20 boys and 5 girls were considered, the boys' records to count 1,500 points and the girls' records 500 points. This trophy was won by the State of Alabama. The average of the records of Alabama's team of 20 boys was above 160 bushels of corn to the acre.

This school was very beneficial to the young agriculturists. Daily lectures on agricultural subjects were given by experts in their respective lines. The boys were taught corn judging, cattle judging, etc., while the girls received instruction in household economics.



FIG. 4.—The Alabama delegation of 100 boys and 8 girls at the Fifth National Corn Exposition, Columbia, S. C., 1913.

Visitors enjoyed the daily canning demonstrations by the girls and asked numerous questions. Many expressed the desire to have the work in their counties in 1913. This school demonstrated the thoroughly aroused interest in scientific agriculture of the people wherever the demonstration work is found. Every Southern State was represented by boys in this school. Ranging between 2 from Oklahoma and over 100 from Alabama (fig. 4) the enrollment from the 12 States is found. Arkansas and every State east of the Mississippi River also sent girls. The expenses of these boys and girls were defrayed by public-spirited citizens, commercial bodies, and county boards of revenue. After a week in the school the boys and girls returned home resolved to make 1913 the banner year in the club work.

Approved:

WM. A. TAYLOR,
Chief of Bureau.

OCTOBER 30, 1913.

BRADFORD KNAPP,
Special Agent in Charge.

